## IN THE CLAIMS:

1. (Currently Amended) A component mounting apparatus for picking up electronic components supplied from a component supply section by suction nozzles attached to a mounting head and mounting the electronic components on a printed circuit board, said apparatus mounting components in ascending order of height, comprising:

## a mounting head;

at least one suction nozzle attached to the mounting head; and

a control section for <u>centaining storing</u> information <u>on</u> <u>relating to</u> the components to be mounted and <u>for moving</u>, based on said information, at least one of the <u>positions of the</u> suction nozzles, the mounting head and the printed circuit board, so that <u>the components</u> to be mounted are mounted in ascending order of height.

2. (Currently Amended) A component mounting apparatus for mounting components in ascending order of height, comprising:

a component supply section for supplying electronic components to be mounted;

a mounting head having at least one suction nozzles

nozzle for picking up the electronic components from said

component supply section and mounting the electronic

components on a printed circuit board;

a data section for storing information relating to components to be mounted;

a component mounting section for positioning and fixing said changing positions of said at least one suction nozzle, the mounting head and a printed circuit board; and

a control section connected to the data section and the mounting section for controlling operations of said suction nozzles, the mounting head and the component providing control signals to the mounting section; and section, wherein

a data section containing information on the components to be mounted,

wherein the positions of the suction nozzles, at least one suction nozzle, the mounting head and the a printed circuit board are driven and controlled so that the components are mounted in ascending order of height based on-height data on relating to the components to be mounted, said height data being supplied from said data section.

- 3. (Currently Amended) A component mounting apparatus, for mounting components in ascending order of height, comprising:
- a component supply section that supplies electronic components for supplying components to be mounted;
- a mounting head having a plurality of suction nozzles

  placed at lest one suction nozzle located in a circular form

  pattern for picking up the electronic components from said

  component supply section and mounting the electronic

  components on a printed circuit board;
- a data section for storing information relating to components to be mounted;
- a component mounting section for positioning and fixing said changing positions of said at least one suction nozzle, the mounting head and a printed circuit board; and
- a control section connected to the data section and the mounting section for providing control signals to said mounting section for controlling vertical movements of said suction nozzles, intermittent rotations of the mounting head and horizontal movements of the component mounting section; and section, wherein

a data section containing information on the components to be mounted,

wherein the movements of the suction nozzles, at least one suction nozzle, the mounting head and the a printed circuit board are driven and controlled so that the components are mounted in ascending order of height based on height data on the relating to components to be mounted, said height data being supplied from said data section.

- 4. (Currently Amended) A component mounting apparatus for mounting components in ascending order of height, comprising:
- a component supply section for supplying electronic components to be mounted;
- a mounting head having at least one suction nozzles

  nozzle for picking up the electronic components from said

  component supply section and mounting the electronic

  components on a printed circuit board;
- a data section for storing information relating to components to be mounted;

a component mounting section for positioning and fixing said changing positions of said at least one suction nozzle, the mounting head and a printed circuit board; and

a control section connected to the data section and the mounting section for providing control signals to said mounting section for controlling vertical movements of said suction nozzles and horizontal movements of the mounting head; and head, wherein

--- a data section containing information on the components to be mounted,

wherein the movements of the suction nozzles at least one suction nozzle and the mounting head are driven and controlled so that the components are mounted in ascending order of height based on height data on the relating to components to be mounted, said height data being supplied from said data section.

5. (Currently Amended) The component mounting apparatus according to claim 3, wherein the control section controls—is for controlling horizontal movements of the component mounting section and drives and controls the driving and controlling movements of the suction nozzles, at least one suction nozzle,

the mounting head and the component mounting section so that the components are mounted in ascending order of height based on the height data on the relating to components to be mounted, said data being supplied from the data section.

6. (Currently Amended) A component mounting method for picking up components supplied from a component supply section by suction nozzles attached to a mounting head and mounting the components on a printed circuit board, for mounting components in ascending order of height, comprising:

providing information relating to components to be mounted; and

the mounting head, the mounting head and the printed circuit board so that the components are mounted on the a printed circuit board in ascending order of height based on said information on the components to be mounted, said information having been provided inside beforehandbefore said driving positions.

- 7. (Currently Amended) The component mounting method according to claim 6, wherein the target—components to be mounted whose distance from other components is narrower than a predetermined value are judged to belong to a same group and the—components belonging to a first group are mounted in ascending order of height within the first group.
- 8. (Currently Amended) The component mounting method according to claim 6, further comprising:

loading data on relating to the shape, size and mounting positions of the components to be mounted and calculating, based on said data, a distance between the mounted components;

classifying the components whose calculated intercomponent distance is narrower than a predetermined value into
one group;

forming another group for those components whose calculated inter-component distance is wider than the predetermined value; and

deciding the an order of mounting the components in said one group so that the components which are lower are mounted firstare mounted in ascending order of height.

9. (Currently Amended) The component mounting method according to claim 6, further comprising:

classifying the—components into a plurality of component groups according to the mounting positions of the—such classified components and then deciding the—an order of mounting the—such classified components;

loading data on the shapes, sizes and mounting positions of said components to be mounted;

calculating distances between the components to be mounted based on the loaded data;

rearranging those—components whose distance from a predetermined component is narrower than a predetermined value value, said distance being a narrow inter-compount distance, so that the components having a the narrow inter-component distance are arranged in ascending order of height;

checking whether all the components have been completed with the above operation; subjected to said rearranging; and

mounting the rearranged components according to said rearranged order.

10. (Currently Amended) The component mounting method according to claim 8-or claim 9, further comprising:

checking whether there are any lower components having a height lower than all other components that should be mounted first when the a distance of the such components from neighboring components is narrower than a predetermined value;

when there are components to be mounted, checking whether the mounting of the components that should be mounted first has been completed; and

mounting the such components on the a printed circuit board.

11. (New) A component mounting apparatus for mounting components in ascending order of height, comprising:

a control section for deciding an order of mounting components to be mounted, based on information relating to mounting positions and heights of such components to be mounted, so that such components are mounted in ascending order of height.

- 12. (New) The component mounting apparatus of claim 11, further comprising:
- a classifier for classifying into at least one group adjoining components spaced apart from each other at a distance shorter than a predetermined value, wherein

said control section is for determining an order of mounting components of each said group.

- 13. (New) The component mounting apparatus according to claim 11, further comprising a data section containing information relating to mounting positions and heights of the components to be mounted.
- 14. (New) The component mounting apparatus according to claim 12, further comprising a data section containing information relating to mounting positions and heights of components to be mounted.

15. (New) The component mounting method according to claim 9, further comprising:

checking whether there are any components having a height lower than all other components that should be mounted first when a distance of such components from neighboring components is narrower than a predetermined value;

when there are components to be mounted, checking whether mounting of components that should be mounted first has been completed; and

mounting such components on a printed circuit board.